FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION

Please fill in the highlighted areas
all sections (IA, IB, IC, etc.) must be addressed or the application will be considered invalid

I. APPLICANT INFORMATION

A. Applicant Name: Big Blackfoot Chapter of Trout Unlimited

B. Mailing Address: PO Box 1

C. City: Ovando State: MT Zip: 59854

Telephone: 406-240-4824 E-mail: ryen@montanatu.org

D. Contact Person: Ryen Neudecker

Address if different from Applicant: See above

City: State: Zip:

Telephone: E-mail:

E. Landowner and/or Lessee Name (if other than Applicant): John & Jamie Stitt

Mailing Address: 315 Cooper Creek Ranch

City: Helmville State: MT Zip: 59632

Telephone: 406.793.7023 E-mail: Stitt.jjas@gmail.com

II. PROJECT INFORMATION*

A. Project Name: Nevada Creek Phase 3A Restoration Project

River, stream, or lake: Nevada Creek

Location: Township: 12N Range: 10 W Section: 10
Latitude: 47.085527 Longitude: -112.675879 *within project (decimal degrees)*

County: Powell

B. Purpose of Project:

The purpose of this project is to build upon a large-scale restoration project along a highly visible reach of Nevada Creek by restoring channel stability, aquatic habitat function and riparian health.

C. Brief Project Description:

Nevada Creek is a large, third-order tributary to the middle Blackfoot River and supports populations of westslope cutthroat trout, rainbow trout, brown trout, and other fish species. Listed by Montana Department of Environmental Quality as impaired for nutrients, siltation, suspended solids and thermal modifications, the Blackfoot Restoration team has initiated a comprehensive restoration program aimed at addressing the causes and sources of water quality and aquatic habitat impairment in the Nevada Creek drainage. In 2010, a 4,400-foot reach of Nevada Creek (phase one) downstream of Nevada Creek Reservoir was restored to improve channel stability, aquatic habitat function, and riparian health. In 2017, phase two was implemented, and involved a 3,700-foot reach located immediately downstream of the phase one project area. Goals of both projects were to reconstruct a lower width-to-depth ratio, meandering, stable channel with well-defined pools, glides and runs while providing shade and bank stability using transplanted vegetation, vegetated wood and brush banks, and containerized plant stock. Follow up monitoring has indicated that westslope cutthroat trout populations have increased 600%, wetland acres have doubled, riparian areas are recovering and bank erosion is virtually non-detectable. The projects have demonstrated that native trout and agriculture can coexist and the downstream private landowner would like to expand the effort to include work on their property.

The proposed project outlined in this application (phase three A) will address approximately 4,700 feet of Nevada Creek and directly ties in with the finished work on phase two. Similar to previous phases of restoration on Nevada Creek, we envision this project will reduce streambank related sources of sediment to Nevada Creek while setting the stage for recovery of the riparian area and aquatic habitat features. Throughout the proposed phase three A, Nevada Creek suffers from eroding banks, lacks instream complexity and is deficient of a suitable riparian vegetation community. Photos representing existing conditions, as well as a project design and pre-project BEHI data are included with this application. Pre-project Bank Erosion Hazard Index (BEHI) data indicates that 69% of banks in the project reach suffer from high to very high levels of bank erosion.

Community richness and population densities of fishes in the main stem Blackfoot River closely reflect the quality of nearby tributaries making the broad level, systematic restoration program across the entire watershed fundamental to the success in recovering native trout. This project will benefit fluvial life histories and includes components necessary for a successful project: addressing habitat simplification, channel impairments, excessive bank erosion and restoring riparian function; all while working in collaboration with private, state and federal partners. This project will continue our efforts and provide new opportunities to educate communities about water quality and encourage new projects and partnerships.

The following project objectives have been developed for restoration efforts on Nevada Creek:

1. Improve habitat for salmonids by increasing overhead and in-stream cover;
2. Decrease surface water temperature;
3. Reduce sediment supply by stabilizing and restoring streambanks;
4. Restore floodplain connectivity where appropriate, and floodplain functionality;
5. Implement revegetation techniques to set the stage for natural recruitment of riparian vegetation; and
6. Implement grazing management systems to protect sensitive riparian areas.

Restoration concepts will focus on restoring eroding streambanks, re-establishing proper channel cross-section, plan form, and longitudinal profile dimensions, and identifying opportunities to increase floodplain connectivity either by raising the channel bed, re-activating meander oxbows, or lowering high banks to bankfull elevation.

D. Length of stream or size of lake that will be treated: 4,700 of Nevada Creek will immediately benefit from this project, in addition to a reduction in sediment to downstream reaches.

E. Project Budget:

Grant Request (Dollars): $ 49,000

Contribution by Applicant (Dollars): $ 7,225 In-kind $ 6,760
(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): $ 149,000 In-kind $ 15,250
(attach verification - See page 2 budget template)

Total Project Cost: $ 227,235

F. Attach itemized (line item) budget – see template

G. Attach **specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support and fish biologist support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete a *supplemental questionnaire*** (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).

H. **Attach land management & maintenance plans that will ensure protection of the reclaimed area**.

III. PROJECT BENEFITS*

A. What species of fish will benefit from this project?:

Westslope cutthroat trout, brown trout and rainbow trout

B. How will the project protect or enhance wild fish habitat?:

The proposed reach along Nevada Creek lacks suitable habitat to support trout populations. By addressing bank erosion issues, improper channel dimensions and lack of floodplain connection and riparian function we anticipate a dramatic improvement in instream and riparian habitat conditions.

C. Will the project improve fish populations and/or fishing? To what extent?:

Yes: Fisheries monitoring data completed on the reach of Nevada Creek restored in 2010, has shown an increase in both size and numbers of trout populations. See data chart included within this application.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

Yes: Public access is available. Landowners request permission is asked prior to accessing their property. Due to the monitoring data of the phase 1 project, we have seen a significant increase in the number of trout and thus we anticipate adding close to 1 mile of fishable habitat on Nevada Creek.

E. The project agreement includes a 20-year maintenance commitment. Please discuss your ability to meet this commitment.

The landowner has agreed to sign a 20-year landowner agreement that includes a riparian grazing management plan.

F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

The channel was historically straightened and the lack of a functional riparian area has caused the channel to erode and downcut.

G. What public benefits will be realized from this project?:

This project involves the continuation of the Blackfoot River Restoration program and the restoration of westslope cutthroat stream. Public benefits include: 1) expanding suitable habitat conditions for pure westslope cutthroat trout, 2) improved habitat for rainbow and brown trout and 3) improved water quality conditions.

H. Will the project interfere with water or property rights of adjacent landowners? (explain):

This project will have no effect on water and property rights of adjacent landowners.

I. Will the project result in the development of commercial recreational use on the site?: (explain):

No commercial recreational use is known to legally occur at this site.

J. Is this project associated with the reclamation of past mining activity?

No.

Each approved project applicant must enter into a written agreement with Montana Fish, Wildlife & Parks specifying terms and duration of the project. The applicant must obtain all applicable permits prior to project construction. A competitive bid process must be followed when using State funds.

IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature:  Date: 11-26-2018

Sponsor (if applicable):

***Highlighted boxes will automatically expand.**

Mail To: Montana Fish, Wildlife & Parks
Fisheries Division
PO Box 200701
Helena, MT 59620-0701

E-mail To: Michelle McGree
mmcgree@mt.gov
(electronic submissions MUST be signed)

Incomplete or late applications will be rejected and returned to applicant.
Applications may be rejected if this form is modified.

*****Applications must be signed and *received* by the Future Fisheries Program Officer in Helena *before* December 1 and June 1 of each year to be considered for the subsequent funding period**.***

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

Both tables must be completed or the application will be returned

WORK ITEMS (ITEMIZE BY CATEGORY)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT	TOTAL COST	CONTRIBUTIONS			
					FUTURE FISHERIES REQUEST	IN-KIND SERVICES**	IN-KIND CASH	TOTAL
Personnel* **								
Survey	60	hrs	$100.00	$ 6,000.00			6,000.00	$ 6,000.00
Design	120	hrs	$110.00	$ 13,200.00			13,200.00	$ 13,200.00
Engineering	50	hrs	$100.00	$ 5,000.00			5,000.00	$ 5,000.00
Permitting	40	hrs	$40.00	$ 1,600.00		1,600.00		$ 1,600.00
Oversight	200	hrs	$100.00	$ 20,000.00			20,000.00	$ 20,000.00
Oversight	100	hrs	$40.00	$ 4,000.00		4,000.00		$ 4,000.00
			Sub-Total	$ 49,800.00	$ -	$ 5,600.00	$ 44,200.00	$ 49,800.00
Travel								
Mileage	2000	miles	$0.58	$ 1,160.00		1,160.00		$ 1,160.00
			Sub-Total	$ 1,160.00	$ -	$ 1,160.00	$ -	$ 1,160.00
Construction Materials****								
Transplants	50	each	$25.00	$ 1,250.00		1,250.00		$ 1,250.00
Willow Cuttings	20000	each	$1.00	$ 20,000.00	5,000.00		15,000.00	$ 20,000.00
Fence	6500	ft	$1.50	$ 9,750.00	2,000.00		7,750.00	$ 9,750.00
Water Gap	3	each	$500.00	$ 1,500.00			1,500.00	$ 1,500.00
Brush	30	CY	$100.00	$ 3,000.00		1,500.00	1,500.00	$ 3,000.00
Wood	100	CY	$250.00	$ 25,000.00		12,500.00	12,500.00	$ 25,000.00
			Sub-Total	$ 60,500.00	$ 7,000.00	$ 15,250.00	$ 38,250.00	$ 60,500.00
Equipment and Labor								
Hydraulic Excavator	410	hrs	$165.00	$ 67,650.00	25,000.00		42,650.00	$ 67,650.00
Tracked Skidsteer	150	hrs	$90.00	$ 13,500.00	5,000.00		8,500.00	$ 13,500.00
Track Truck	175	hrs	$135.00	$ 23,625.00	8,000.00		15,625.00	$ 23,625.00
Labor	200	hrs	$45.00	$ 9,000.00	4,000.00		5,000.00	$ 9,000.00
			Sub-Total	$ 113,775.00	$ 42,000.00	$ -	$ 71,775.00	$ 113,775.00
Mobilization								
All Equipment	1	lump Sum	$2,000.00	$ 2,000.00			2,000.00	$ 2,000.00
			Sub-Total	$ 2,000.00	$ -	$ -	$ 2,000.00	$ 2,000.00
			TOTALS	$ 227,235.00	$ 49,000.00	$ 22,010.00	$ 156,225.00	$ 227,235.00

****Design and oversight consultant was seleted through a competitive Request for Proposals process**

MATCHING CONTRIBUTIONS (do not include requested funds)

CONTRIBUTOR	IN-KIND SERVICE	IN-KIND CASH	TOTAL	Secured? (Y/N)
Landowner	$ 15,250.00	$ -	$ 15,250.00	Yes

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

Montana Watershed Coalition Council	$ -	$ 8,000.00	$ 8,000.00	Yes
USFWS Partners Program	$ -	$ 15,000.00	$ 15,000.00	Yes
DEQ 319 Program	$ -	$ 105,000.00	$ 105,000.00	Yes
Bring Back the Natives	$ -	$ 21,000.00	$ 21,000.00	Yes
Big Blackfoot Chapter of Trout Unlimited	$ 6,760.00	$ 7,225.00	$ 13,985.00	Yes
TOTALS	$ 22,010.00	$ 156,225.00	$ 178,235.00	

Nevada Creek phase 3A reconstruction

007-2019

N

Flow Direction

0 200 400 800 1,200 1,600 Feet

N

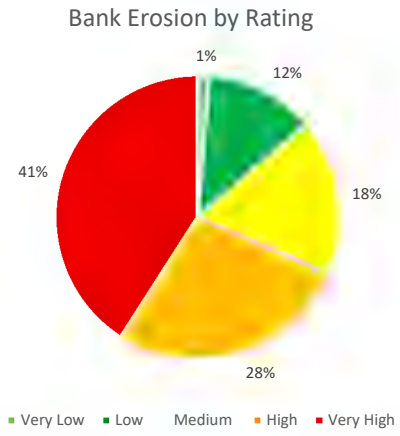
Flow Direction

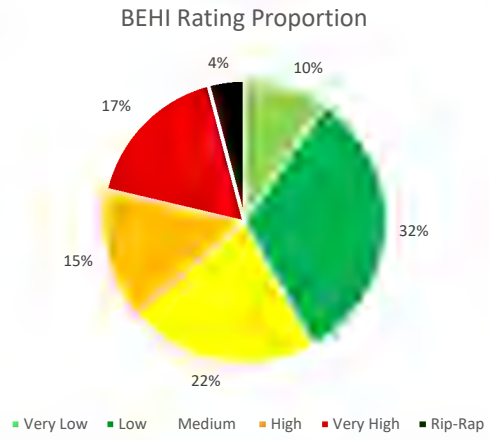
Legend

- Rip-Rap
- Very Low
- Low
- Medium
- High
- Very High

2018-07-29. River Design Group. Imagery: NAIP 2015 & UAS 2018.

Stream Bank Erosion Sediment Yield						
BEHI Rating	**Bank Length (ft)**	**Erosion Rate (ft/yr)**	**Bank Height (ft)**	**Sediment Yeild (Low Density)**	**Sediment Yeild (High Density)**	**Sediment Yield Mean (Tons)**
Very Low	1862	0.17	0.7	10.2	14.2	12.2
Low	6245	0.17	2.0	94.7	131.5	113.1
Medium	4193	0.23	3.1	134.5	186.8	160.7
High	2886	0.31	5.2	209.3	290.7	250.0
Very High	3319	0.39	5.3	310.9	431.8	371.4
Rip-Rap	792	0	5.5	NA	NA	0
					TOTAL	**907.4**





Photos 1-2: Existing Conditions along Nevada Creek Phase 3.

Nevada Creek Phase 1 Restored in 2010. Before & After Photo point

Nevada Creek Phase 2 Restored in 2017. Before & After Photo point

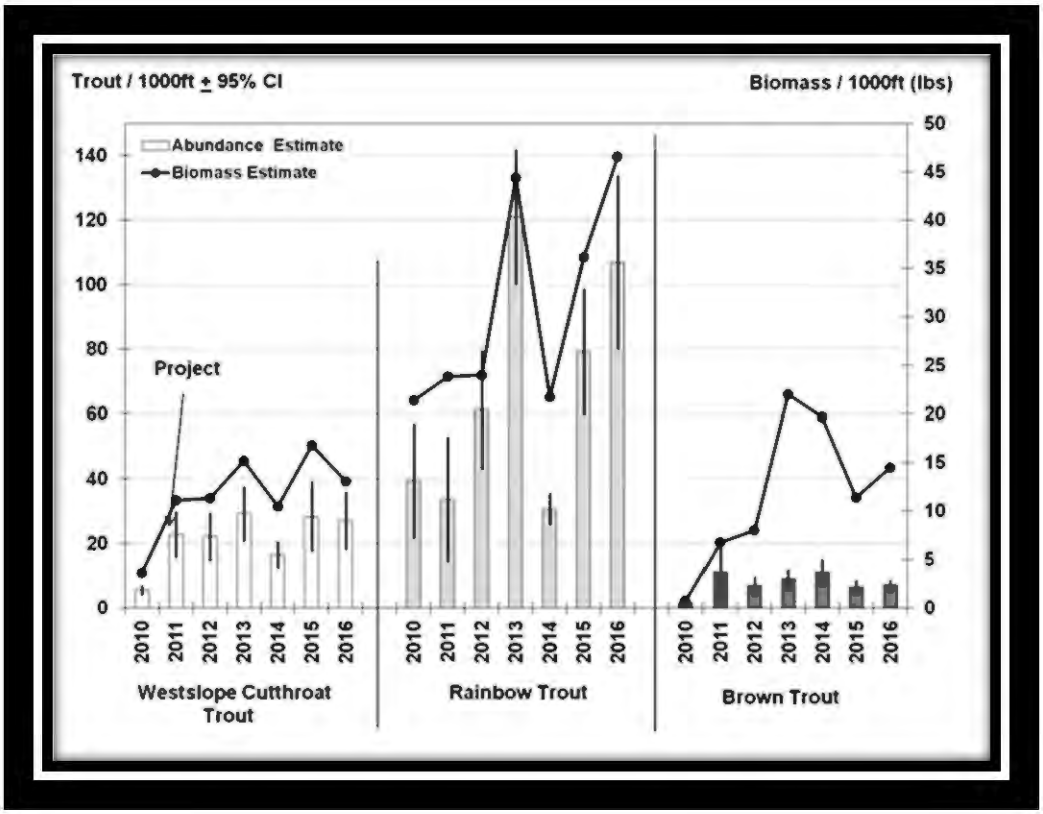


Figure 1: Nevada Creek Phase 1 Monitoring Data

11/28/18

To Whom It May Concern:

My name is Jamie Stitt and my family owns the stretch of Nevada Creek that this proposed project is including. We are very much in support of this restoration project, not only for our own benefit but for the overall health of the stream and all that it entails.

We are losing massive amounts of stream bank each year due to erosion. The creek is under cutting the highway as well as cutting out into our fields, and making a mess of our hay meadows. We would like to have a healthy stream for generations to come and this project is our only hope of that.

Thank you for considering some funding to this project.

Sincerely,

Jamie Stitt

Patrick Uthe
3201 Spurgin Road
Missoula, MT 59804
406-542-5532
patrick.uthe@mt.gov

November 30, 2018

Montana Fish, Wildlife and Parks
Attn: Michelle McGree
1420 East 6th Ave.
Helena, MT 59620

Dear Future Fisheries Panel:

This letter is written in support of the Nevada Creek Phase 3A Restoration Project application submitted by the Big Blackfoot Chapter of Trout Unlimited. Nevada Creek is a heavily degraded system that suffers from sedimentation, low flows, nutrient inputs, elevated water temperatures, and lack of instream habitat complexity. Salmonid assemblage in Nevada Creek is primarily comprised of brown trout, cutthroat trout, and rainbow trout. Bull trout have been captured during electrofishing surveys in recent years, but densities are very low. Restoration efforts in the Nevada Creek drainage have been increasing in recent years and have elicited very encouraging responses from the salmonid community.

A recently completed project, directly upstream from the Phase 3A location, resulted in a significant increase in trout abundance following restoration of a severely degraded section of stream. The estimated density of age-1 and older trout prior to restoration was 243 trout/mile and increased to an average post-treatment density of 554 trout/mile. Similar habitat actions and treatment techniques are proposed for the Phase 3A project, which are expected to provide a similar benefit to the fish community. The narrowing and deepening of the channel will help reduce water temperatures, reduce erosion, and provide suitable fish habitat throughout periods of low flow. The reestablishment of a healthy riparian corridor will create overhanding fish cover and help moderate water temperatures during the summer. Furthermore, Nevada Creek is one of the largest contributors of sediment to the Blackfoot River, so the water quality benefits of this individual project will extend far beyond the project boundaries.

The Nevada Creek Phase 3A project will significantly improve the quality of fisheries resources in Nevada Creek and will augment the benefits of previous restoration efforts. Moreover, the proposed project will have immediate local benefits, while contributing to the broader conservation and restoration program in the Blackfoot River basin. Thank you very much for

your consideration of this funding application. Please do not hesitate to contact me if you have any questions or would like additional fisheries information from the project area.

Sincerely,

Patrick Uthe
Fisheries Biologist

United States Department of the Interior
FISH AND WILDLIFE SERVICE
MONTANA PARTNERS FOR FISH & WILDLIFE PROGRAM
PO Box 66
Ovando, Montana 59854 406/793.7400

IN REPLY REFER TO:

November 26, 2018

Montana Fish, Wildlife & Parks
Future Fisheries Review Panel
PO Box 200701
Helena, MT 59620

Dear Committee Members:

This letter is in reference to the Nevada Creek Phase 3 Restoration Project located in the Blackfoot Watershed being proposed by the Big Blackfoot Chapter of Trout Unlimited. The U.S. Fish and Wildlife Service fully support this project because of the incredible biological values associated with it.

The Partners for Fish and Wildlife has a long history of working with the associated private landowners and other partners collaborating to restore the native trout fishery of this important tributary feeding the Blackfoot River. This project is exciting in that we will be able to continue our efforts of restoring native trout within the watershed by working with committed landowners.

We commend the efforts of the many partners for their time and due diligence with this important project and urge the Future Fisheries Program Review Committee to support this grant application.

If you have any questions regarding this project feel free to contact me.

Sincerely,

Randy Gazda

Randy Gazda
Assistant State Coordinator
Blackfoot Biologist
Partners for Fish and Wildlife Service